THE IMPACT OF E-SERVICE QUALITY ON CUSTOMER SATISFACTION IN SELECTED INDIAN BANKS

A SYNOPSIS

Submitted by

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Introduction

In India, banking is a thriving industry, owing to its emphasis on technical innovation. Modern technology-based banking has emerged as the most important priority area in banks' digital transformation agendas. During the recent past decade, Indian banks implemented technology-based solutions to improve customer experience, boost income, optimize cost structure, and hand business risk. As information technology has turn out to be the most critical enablers of change in the banking sector in terms of transaction processing in addition to numerous other internal procedure and system. The various technology platforms utilized by banks to perform their everyday banking operations, their reporting technique, and the way in which interbank clearing and transactions are conducted have all changed significantly over the time period.

E-Service Quality

Meeting customers' wants and requirements, as well as how effectively the service level given meets customer expectations, is what service quality is all about. In banking, service quality is continually anticipating and meeting customers' requirements and expectations. India has been one of the most acceptors of information technology in the last decade, owing to its ability to deliver software solutions to organizations all over the world. This potential has given India's domestic banking industry a huge push to adopt cutting-edge technology, particularly in the areas of e-commerce solutions and internet banking. Customers have embraced e-banking, or the delivery of banking services via electronic systems, as a result of rapid advancements in information technology and increased competition among banks. Internet banking services are a set of e-channels for executing banking transactions over the mobile phone, internet, television, telephone, and computer. As technology evolves and improves, banking consumers' expectations and outlooks on service are expanding Zulfauzy&Rachmawati(1). Customers nowadays want to be able to operate and complete their financial transactions without having to go to the bank, without being confined by the bank's working hours, and to complete all of their payments in a timely and cost-effective manner. As a result, the quality of internet banking services should be classified according to flexibility, freedom, independence, and elasticity in order to accommodate these requirements.

E-service quality is described as the ability of a webpage to facilitate and offer a specific service to consumers in a timely and effective manner. The service quality features stated that electronic banking must provide to entice customers to switch to and continue using online transactions are perceived utility, dependability, ease of use, openness, safety, and continuous development. Individual anticipations about correctness, security, user-

friendliness, user participation, network speed and expediency were shown to be the most important quality criteria in the perceived usefulness of internet-based e-retail banking. The major factors influencing customers decision to use or not use e-banking services are the age of consumers, the hitches of using the Internet and the distress of transformations in the banking sector as a result of technological advancement. Furthermore, the lack of information regarding products and services provided to customers through electronic banking delivery modes have influence on individual decision.

Empathy, tangibility, responsiveness, assurance, and reliability are among the five traditional measurements included in the basic service quality instrument. From the traditional service quality model, which includes privacy, fulfilment, system availability, and efficiency.Zeithaml et al(2) developed two modified measurement scales for capturing e-service quality and customer satisfaction. The fundamental e-service quality model investigates several characteristics of online services, such as efficiency, which assesses the ease and speed with which the online system utility may be used. Fulfillment investigates how website promises are carried out. However, system availability is important in determining the technically and correctness of websites, as well as ensuring the privacy of customers' information. Because, the Internet has become such an important and effective instrument for marketing goods and services, there is a growing trend among businesses to use it as a virtual market. Aside from system and information quality, service quality has been an important factor in determining the success of an information system and a key component of consumer happiness in the online purchasing field.

As a result, in today's competitive market, it is impossible to compete without establishing a comprehensive internet banking system. To create an impression of excellence in the minds of customers, it is critical to give the highest quality online banking services. Excellent online services, without a doubt, lead to customer happiness and retention, and a happy customer can be a good source of positive word of mouth for the company's image and new customers. In such a competitive climate, it is critical to check and assess service quality on a regular basis, as well as to expand online banking services to customers. To keep their customers in the long run, banks should offer enhanced goods and the highest quality electronic services. Electronic service quality necessitates a thorough understanding of online dimensions of service quality; as a result, e-service quality assessments have become increasingly important in gaining a competitive advantage over competitors Shankar &Jebarajakirthy(3).

Customer Satisfaction

Customer satisfaction, customer relationships, and quality services are all critical factors for banks to keep customers for the long term, and investments in all three areas result in increased market share and profitability. Quality service often leads to more repeat purchases and a larger market share. Satisfaction of customers with regard to bank services happiness leads to attain better customer loyalty, which also leads to achieve profitability, and as a result, service quality is considered one of the fundamentals of customer satisfaction Raza et al(4). Banking has paid more attention to service quality and made better efforts to achieve a greater level of service quality so as to gratify customers. The nature of accessibility of service varies from person to person. Because the features of services are diversified, intangible, and perishable in terms of production and consumption, it is an ambiguous and complex concept. Although there is no universally accepted explanation, service quality can be understood as a wide-ranging customer assessment of a specific service and the amount to which it encounters their anticipations and offers satisfaction.

Service quality has been identified as a vital success factor for businesses looking to gain a competitive advantage. The quality of Internet banking services is an important indicator of both banking industry performance and customer satisfaction. Because the technology-oriented atmosphere lacks face-to-face connection between customers and bankers, customer satisfaction is harder to achieve in an online setting. A customer with satisfaction can be thought of as an unpaid brand ambassador for the company. In the banking industry, satisfied customers can contribute to employee branding and customer engagement Nimako et al(5). Customers, on the other hand, will remain unsatisfied if the service falls short of their expectations. Customers are more likely to spread negative word-of-mouth and never return to a company if the gap between their expectations and actual experience is large. Customers construct satisfaction attitudes or evaluations by comparing their pre-purchase expectations of what they would obtain from a product to their subjective views of the performance when they acquire it. Customer satisfaction is described as the sum of a person's perceptions, evaluations, and psychological reactions to a product or service's consuming experience.

Customer satisfaction and the quality of internet banking services are unquestionably the two most important ideas in service marketing. In the banking business, satisfaction is often thought of as a multidimensional notion. Customer satisfaction measurement is critical in the service business because it is a determinant of the company's performance Santhiya&Saravanan(6). Similarly, it has been determined that the quality of internet banking services is a critical factor in maintaining client happiness. Banks must provide facilities that

are satisfactory to their clients in order to remain competitive in the market. On the other hand, as the importance of e-services quality in technology grows, users will be able to compare different services offered more easily than through traditional channels. Despite the fact that customers are becoming more aware of online services, there is an issue with defining online service quality, determining its determinants, and measuring it.

Review of Literature

Kaur et al(7) examined the adoption of digital banking channels and role of in-branch efforts. To provide the finest services to consumers, banks offered digital banking services such as internet banking, mobile banking, and automated teller machines. In this way, in-branch experience and technological advancements can help to increase adoption of digital banking services. Results revealed that customers of various profiles were interested in using digital banking. Computer self-efficacy was a prelude to the acceptance of digital banking since it created a perception of ease of use for mobile banking. Similar to how branch service quality and bank trust were the major antecedents in building trust in e-banking, it eventually pushed people to switch to digital banking. Findings stated that customer migration to digital banking was primarily driven by in-branch communication, digital innovation, customer-centric activities, and human roles. The study was concluded that introduction of digital banking was largely due to in-branch efforts.

Khatun et al.,(8) endeavored to measure mobile banking services to increase financial access of customers during the Covid-19 pandemic in Bangladesh. It was found that digital expertise in the mode of mobile banking can help to speed up financial access in the aftermath of a pandemic. Results of the study stated that the number of customers using mobile banking services surged throughout the epidemic. In this pandemic period, government policies linked to mobile banking dealings such as remuneration imbursement, payment of utility bills, cash in and out, and person to person transactions had a huge impact on book financial access. Findings showed that customers' demand for mobile banking has risen for remittances, contributions, recharges, online purchases, and other services. It was concluded that government initiatives help to expand the accessibility and service efficiency of mobile banking services.

Qasabah and Siddiq (9) examined the customer perception and satisfaction towards e-banking service in Yemen and its quality. The study looked at the overall quality of e-banking services as well as the quality of specific dimensions like fulfilment, reliability, website design, privacy, and customer support. E-banking services are quick and easy to use, and they allow customers to keep track of their accounts on a frequent basis. Results showed that customer perceptions and satisfaction with e-banking services are modest. In addition,

the overall quality of e-banking services, as well as the quality of its dimensions' fulfilment, reliability, website design, privacy, and customer service, is moderate. Findings indicated that banks must take steps to improve the quality of their e-banking services. It was concluded that this will increase customers' perceptions and happiness with banks' e-banking services, which will benefit banks' overall performance.

Choudhury et al(10) analyzed the factors influencing digital banking service quality. The study compared the SBI and HDFC bank in Hyderabad in India. The study considered all e-service quality dimensions. The study found that out of the seven characteristics, fulfilment and contact contribute the most, and that customers believe SBI has an advantage over HDFC in terms of efficiency, system, availability, fulfilment, and responsiveness, but that HDFC outperforms SBI in terms of website design and privacy. When it comes to factor touch, both are nearly equal. As a result, it is an eye-opener for the executives of both prime banks to comprehend and take the required actions to improve the quality of digital banking services. All seven characteristics were shown to have a strong relationship with the digital banking service quality supplied by SBI and HDFC bank that is, privacy, fulfilment, contact, responsiveness, efficiency, website design, and system availability.

Abil Das and Ravi(11) attempted to evaluate the impact of e-banking service quality on customer satisfaction. It was found that responsiveness, reliability, communication, privacy and security, and website design are all considered as an important service quality factors. The study found that these service quality factors have a beneficial impact on customer satisfaction with e-banking services. Findings of the study showed that among young customers, website design is more important than other factors. Findings also stated that customers trusted banks' online transactions, and gave less attention to security and privacy, responsiveness and communication, and reliability. Findings disclosed that the quality of e-banking services assures a high degree of satisfaction for a variety of financial operations. It was concluded that banks should maintain high standards in record keeping and financial transaction security.

Bala et al(12) investigated the service quality and satisfaction of customers on mobile banking during Covid-19 lockdown in Bangladesh context. The study emphasized that security, reliability, responsiveness, efficiency, visibility, and trust as service quality factors while accessing mobile banking services. It was found that customer satisfaction was found to be influenced by efficiency, responsibility, and reliability, among five service quality attributes. Customer satisfaction with mobile banking accessibility was unaffected by visibility, security, or trust. Similarly, the service quality dimensions have an impact on customer satisfaction in terms of service accessibility, privacy, and ease of navigation, among

other things. To sum up, customer satisfaction has a substantial impact in establishing loyalty among the customer group. It was concluded that banks should make an effort to improve mobile banking visibility and security options.

Fianto et al(13) examined the mobile banking service quality and its impact on customer satisfaction in Indonesian Islamic banks. In order to determine consumer satisfaction, the study looked at the application system, design, ease, enjoyment, and security. Results revealed that the application system, design, enjoyment, and security all had a major impact on consumer satisfaction. The simplicity of use had little bearing on customer satisfaction with the quality of mobile banking services. As a result, Islamic banks should focus more on improving their mobile banking application system, as it is the most critical aspect affecting customer happiness. Findings revealed that a welcoming interface design, as well as a convenient and secure mobile banking solution, should be correctly created to maintain good customer relationships. It was concluded that good service quality can improve bank performance and customer satisfaction.

Nazaritehrani and Mashali(14) investigated the growth of e-banking channels and market share in developing countries. The study recognized that point of sale terminals, ATMs, online banking, mobile banking, and telephone banking as examples of creative channels that banks utilize to provide services to their consumers. The study showed that customers are having significant trouble getting services via an information technology-enabled platform. Findings of the study revealed that inadequate customer knowledge of information-enabled services has a significant impact on banks. The adoption of e-banking services is also hampered by cyber-fraud and a lack of direction. Findings also revealed that there is a strong link between a new service platform and a bank's market share. In conclusion, it was found that point of sale terminals, telephone, and internet banking all have a considerable impact on increasing bank market share.

Anbumalar et al(15) investigated the consumer awareness and usage of e-banking transactions through mobile banking applications. The study highlighted that e-banking was used for bill payment, money transfers, credit cards, recharging, and ticket purchases. The study showed that commercial banks supplied customers with security and simple transactions in order to boost customer confidence. Results revealed that young people were the most likely to use such services. Young people are technologically adept and eager to use mobile banking services. Findings indicated that consumers were sufficiently informed of e-banking transactions. Consumers used their mobile phones to make payments for online transactions, which saved them a lot of time and money. The study was concluded that most essential uses of mobile banking are convenience, comfort, SMS alerts, and mobile payments.

Al Amin et al(16) attempted to analyze the customer attitude towards mobile banking usage in Bangladesh. The study stressed that customers' attitudes are shown to be closely linked to convenience, purchasing, and usage benefits. In addition, psychological elements such as fashion, facilitating difficult transactions, value addition, and prestige had influenced customer attitudes toward mobile banking. Results indicated that the benefits of using mobile banking and psychological elements had a substantial impact on a positive attitude about using mobile banking. However, the shopping benefit had a large but minor impact on positive attitudes toward using mobile banking services. Findings revealed that customer satisfaction with mobile banking was influenced by usage, convenience, shopping rewards, and psychological variables. To sum up, few inefficiencies were found to have a significant influence on mobile banking usage.

Metlo et al.,(17) intended to assess the impact of mobile banking on customer satisfaction. The survey looked at customer attitudes about measuring their happiness with mobile banking, as well as perceived ease of using banking services, service usefulness, credibility, and perceived ease of using banking services. Results revealed that mobile banking had a greater impact on consumer satisfaction. Customer satisfaction was influenced by the perceived ease of using financial services, service usefulness, credibility, and attitude. Furthermore, it aided in attracting more customers to use the banks' services. Findings stated that mobile banking and satisfaction were found to have a favourable and significant relationship. Findings revealed that banks should aim to provide value-added services through their mobile banking platforms. Furthermore, creating a variety of user-friendly applications improves the consumer experience, allowing them to transact more with mobile banking.

Research Gap

There has been a slew of national and international studies aimed at determining e-service quality assessment of banking services offered in digital way. Following that, the studies on e-service quality on banking sector had been evaluated, which shed light on many dimensions of e-service quality. However, across the many consumer segments, e-service quality in banking is a relatively new phenomenon. Few previous researches in the e-service quality setting examined the awareness on e-banking services, E-S-Qual dimensions, service quality, intention to use, expediency and potential threats in accessing e-banking services. Customer satisfaction on online banking and e-service quality are evaluated in a similar way. Few studies have looked into the impact of e-service quality on customer satisfaction, as well as the relationship between demographic profile and customer satisfaction. However, no studies have looked into the impact of E-S-Qual on customer satisfaction. Similarly, there is

no specific study to address the intention to use e-banking channels and its effect on customer satisfaction. Furthermore, earlier studies failed to incorporate the e-service quality in a developing regions perspective. Therefore, this study paid its effort to test the impact of e-service quality and intention to use e-banking on customer satisfaction. Moreover, the study made a comparative assessment of e-service quality in public and private sector banks.

Research Hypotheses

The following research hypotheses are proposed to test.

1. Demographic profile of customers has impact on service efficiency, fulfilment, privacy, website aesthetics, responsiveness, e-service quality, potential threats, expediency, intention to use and customer satisfaction.
2. Mean score of demographic profile of customers are differentiated significantly.
3. Antecedents have a positive and significant impact on service efficiency, fulfilment, privacy, website aesthetics, responsiveness, e-service quality, potential threats, expediency, intention to use and customer satisfaction.
4. Service efficiency, fulfilment, privacy, website aesthetics and responsiveness have positive and significant impact on e-service quality.
5. Potential threats and expediency have positive and significant impact on intention to use.
6. E-service quality has positive and significant impact on intention to use.
7. E-service quality and intention to use have positive and significant impact on customer satisfaction.

Objectives of the Study

The following are the research objectives.

1. To check the demographic profile of customers availing e-banking services in Virudhunagar district.
2. To measure the customer awareness on e-banking services of commercial banks.
3. To evaluate the impact of demographic profile of customers with service efficiency, fulfilment, privacy, website aesthetics, responsiveness, and e-service quality.
4. To assess the impact of demographic profile of customers with potential threats, expediency, and intention to use.
5. To examine the impact of demographic profile of customers with customer satisfaction on e-banking services.
6. To investigate the causal relationship among service efficiency, fulfilment, privacy, website aesthetics, responsiveness, e-service quality, potential threats, expediency, intention to use and customer satisfaction on e-banking services.

Statement of the Problem

Consumers have the option of using the internet banking system as a self-service channel. This enables banks to reduce their employees to a certain extent, hence lowering the administrative costs they endure. Internet banking is more cost-effective than traditional banking because it minimizes the administrative expenditures and paperwork associated with bank transactions. The goal of e-service quality is to provide superior service to customers so that their needs are met and they are completely happy when utilizing a particular service. When it comes to a banking product or service, the customer has a set of characteristics in mind. As customers utilize the service, customers compare it to the characteristics that they already keep in mind. Such evaluation is essentially a e-service quality assessment. A customer effort to align their service expectations to pre-existing attributes in their thoughts. If the service quality exceeds expectations, the consumer is completely satisfied. Therefore, the study made an effort to test e-service quality assessment of banking services in public and private sector banks with special reference to Virudhunagar District.

Conceptual Framework

The following conceptual framework is proposed to check the cause-and-effect relationship among the research variables.

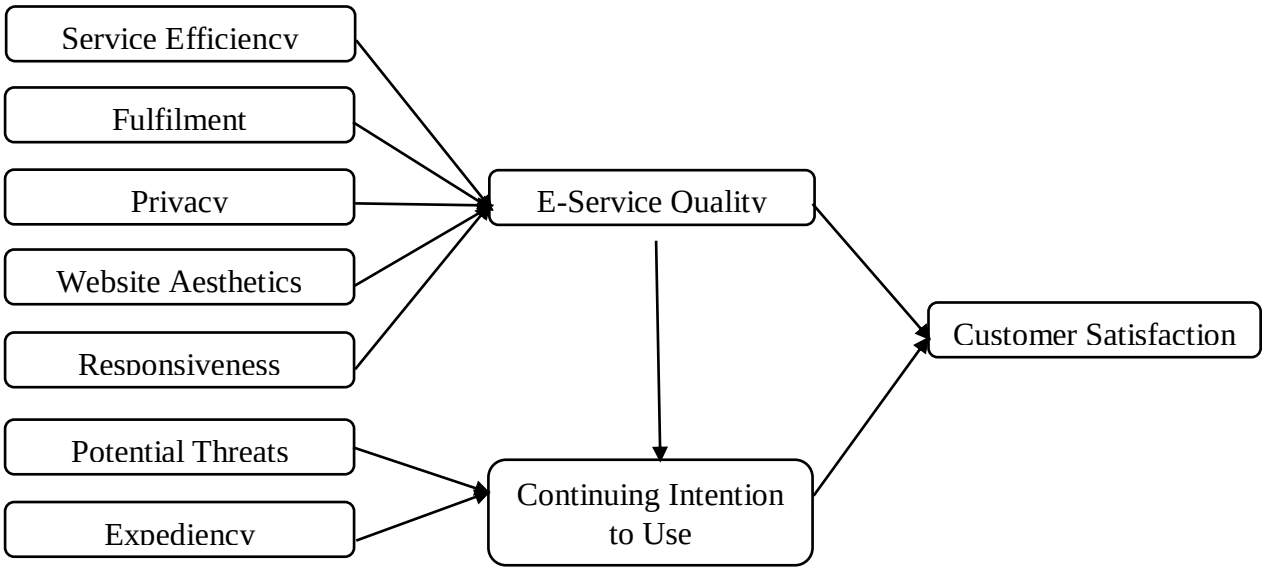

Figure 1.1Conceptual Framework

Research Design

In data analysis, an efficient research design will help to arrive meaningful results. The goal of research design is to figure out what, where, who, when, and how to answer a research question. It defines how the study is conducted, outlines the techniques and procedures for acquiring and investigating the data, and assists in the formulation of appropriate research hypotheses. It reflects the general approach for bringing together various elements of the research activity in a logical and ordered manner, guaranteeing that the issue

under investigation has been adequately addressed. The current study employed causal research design, also known as an explanatory research design. The causal study design is used to determine whether variables have a cause-and-effect relationship. The causal research approach is chosen because it accurately portrays or accounts of a respondent's characteristics, such as behaviour, views, talents, beliefs, and knowledge. This design is adopted to suit the research objectives, which are to determine the cause of e-service quality and intention to use online banking on customer satisfaction.

Data Analysis

Data analysis is not an end task in the research process. Its goal is to compile data that will aid in the development of solutions to the problems at hand. The choice of an effective data analysis technique is influenced by a number of factors. These factors include the research design, type of data, and the underlying hypotheses of the test statistics, and other related factors. The study employed both descriptive and inferential statistics. The following are the most commonly used statistical techniques for data analysis.

Reliability

The consistency in assessing a specific phenomenon among the e-banking customers is termed as reliability. If a customer is asked the same question frequently, the identical reaction should be expected each time. Reliability ensures that the response quality remains constant. Cronbach's alpha is used to determine the questionnaire's internal reliability. A higher alpha score indicates that the data gathering questionnaire is extremely dependable. It is regarded good internal consistency if the computed Cronbach's alpha values are greater than $\alpha > 0.7$, and it is considered excellent internal consistency if it surpasses $\alpha > 0.9$. The calculated Cronbach's alpha values are presented Table1.1.

Table 1.1 Reliability Test

S. No	Constructs/ Items	Scale Items	Cronbach's Alpha
1.	Service Efficiency	3	0.846
2.	Fulfilment	3	0.889
3.	Privacy	3	0.922
4.	Website Aesthetics	3	0.905
5.	Responsiveness	3	0.931
6.	e-Service Quality	5	0.862
7.	Potential Threats	4	0.879
8.	Expediency	4	0.895
9.	Intention to Use	5	0.902
10.	Customer Satisfaction	6	0.915

Data: Primary Sources

shows that the computed Cronbach alpha values are greater than the benchmark limit of 0.7. It proves that the collected data from the respondents by disseminating questionnaire establishes high reliability. Furthermore, the data has all required criteria for validity.

Validity

The data for the study gathered from the respondents should be reliable and valid. Validity is a critical indicator of a survey instrument's quality. It includes the full experimental model and analyses whether the results gained meet all of the research methodology requirements. Content, discriminate, and convergent validity are all checked to confirm the questionnaire's validity.

Content Validity

The main substance of a construct should be covered and measured by the statements given in the research questionnaire, which is known as content validity. The purpose of content validity is to ensure that the assertions are accurate, clear, easy to understand, and applicable to the specific construct in the questionnaire. The constructs/items in the questionnaire are reviewed by banking experts and academic specialists. The appropriate adjustment is carried out based on the expert's comments and responses to certify effective content validity.

Confirmatory Factor Analysis

Testing of questionnaire validity is an important requirement for qualitative researches. Therefore, AMOS is used for execution of confirmatory factor analysis. The validity of questionnaire is tested through confirmatory factor analysis. The construct validity of questionnaire is tested in two ways like convergent validity and discriminate validity. The following variables are taken into consideration for executing confirmatory factor analysis.

The observed, endogenous variables are SRVE1 to SRVE3, FLMT1 to FLMT3, PVCY1 to PVCY3, WSAT1 to WSAT3, RPSN1 to RPSN3, ESQL1 to ESQL5, PTLT1 to PTLT4, EXDY1 to EXDY4, ITNU1 to ITNU5, and CSFN1 to CSFN6. The unobserved, exogenous variables are e1 to e39, SRVE, FLMT, PVCY, WSAT, RPSN, ESQL, PTLT, EXDY, ITNU, and CSFN.

CFA is a method used for scale measurement that permits to check the consistency of the structure of factors in construction of scales. The main purpose of confirmatory factor analysis is to perceive if the data gathered from respondents follows a predetermined measuring model. CFA is used to check that the measurement model has a sufficient amount of goodness-of-fit, as well as to perceive how the data support construct validity. Subsequent

to the execution of confirmatory factor analysis, the measurement model is given in Figure 1.2,

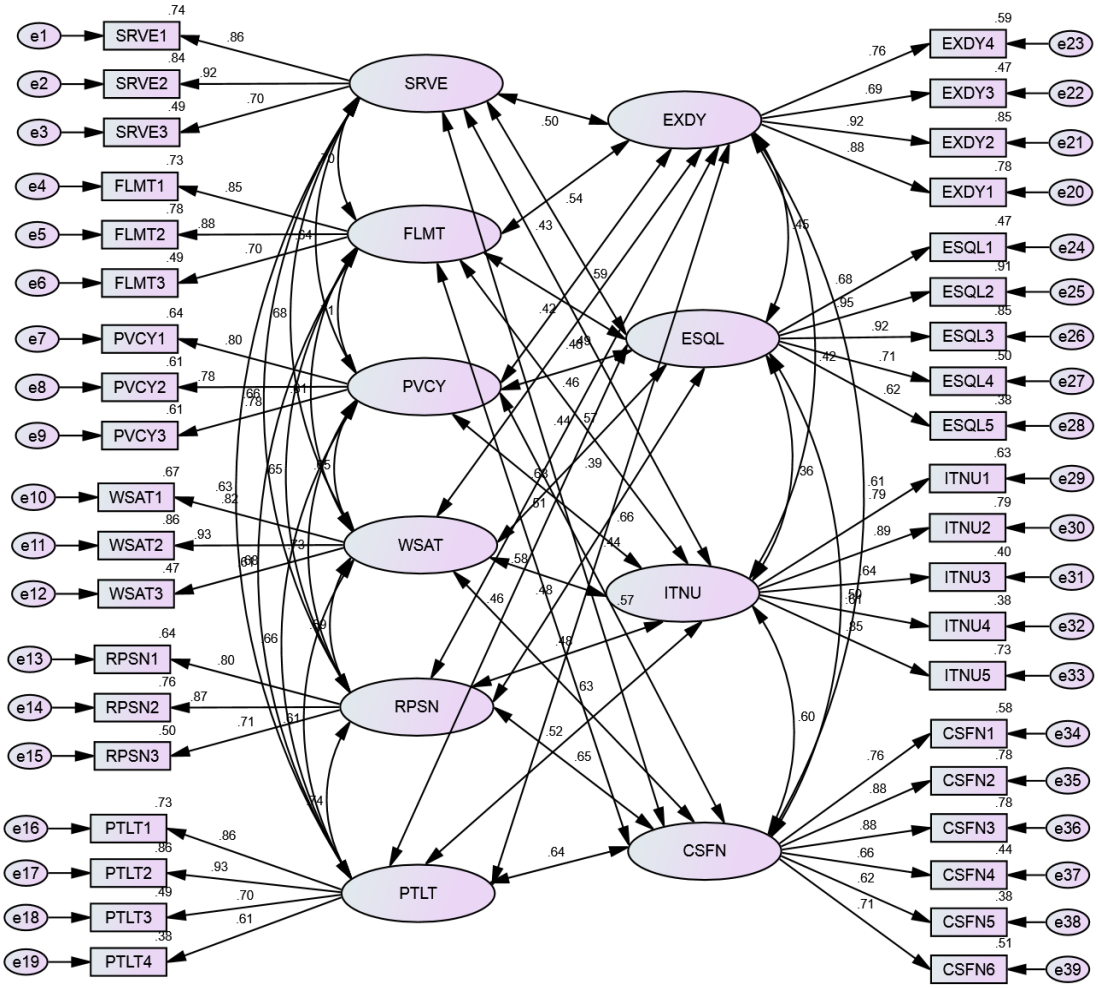

Figure1.2: Measurement Model – Standardized Coefficients

Table 1.2 Path Analysis - Measurement Model

Path			Unstandardized Coefficients	Standardized Coefficients	t	p
SRVE3	<---	SRVE	1.020	.700	15.189	***
SRVE2	<---	SRVE	1.315	.919	22.591	***
SRVE1	<---	SRVE	1.237	.861	20.411	***
EXDY4	<---	EXDY	1.165	.765	17.280	***
EXDY3	<---	EXDY	1.036	.687	14.893	***
EXDY2	<---	EXDY	1.392	.919	22.929	***
EXDY1	<---	EXDY	1.373	.881	21.372	***

PTLT4	<---	PTLT	.965	.614	12.891	***
PTLT3	<---	PTLT	1.070	.698	15.218	***
PTLT2	<---	PTLT	1.316	.925	23.119	***
PTLT1	<---	PTLT	1.181	.856	20.414	***
ESQL1	<---	ESQL	1.071	.684	14.979	***
ESQL2	<---	ESQL	1.250	.952	24.631	***
ESQL3	<---	ESQL	1.216	.922	23.304	***
ESQL4	<---	ESQL	.954	.709	15.720	***
ITNU2	<---	ITNU	1.255	.890	21.599	***
ITNU3	<---	ITNU	.962	.636	13.388	***
ITNU4	<---	ITNU	.908	.614	12.816	***
ITNU5	<---	ITNU	1.350	.854	20.238	***
CSFN1	<---	CSFN	1.218	.761	17.175	***
CSFN2	<---	CSFN	1.436	.882	21.543	***
CSFN3	<---	CSFN	1.383	.883	21.578	***
CSFN4	<---	CSFN	1.041	.664	14.268	***
ESQL5	<---	ESQL	.789	.617	13.125	***
ITNU1	<---	ITNU	1.162	.793	18.091	***
CSFN5	<---	CSFN	.947	.616	12.956	***
CSFN6	<---	CSFN	1.066	.713	15.676	***
FLMT3	<---	FLMT	1.003	.702	15.113	***
FLMT2	<---	FLMT	1.147	.882	20.935	***
FLMT1	<---	FLMT	1.098	.852	19.855	***
PVCY3	<---	PVCY	1.079	.781	17.244	***
PVCY2	<---	PVCY	1.110	.781	17.234	***
PVCY1	<---	PVCY	1.048	.803	17.921	***
WSAT3	<---	WSAT	.999	.683	14.655	***
WSAT2	<---	WSAT	1.328	.927	22.642	***
WSAT1	<---	WSAT	1.166	.817	18.739	***
RPSN3	<---	RPSN	1.087	.707	15.176	***
RPSN2	<---	RPSN	1.336	.870	20.374	***
RPSN1	<---	RPSN	1.268	.798	17.983	***

Data: Primary Sources **** Significant at 1% level*

Table 1.3 Measurement Model Fit Indices

Fit Indices	Model Fit Indices	Threshold Value
CMIN/df	2.845	<3
Normed Fit Index (NFI)	0.927	>0.9
Relative Fit Index (RFI)	0.916	>0.9
Tucker-Lewis Index (TLI)	0.902	>0.9
Comparative Fit Index (CFI)	0.907	>0.9
Goodness of Fit Index (GFI)	0.910	>0.9
Adjusted Goodness of Fit Index (AGFI)	0.902	>0.9
Incremental Fit Index (IFI)	0.908	>0.9
Parsimonious Comparative Fit Index (PCFI)	0.916	>0.9
Parsimonious Normed Fit Index (PNFI)	0.912	>0.9
Root Mean Square Error of Approximation (RMSEA)	0.057	<0.06

Data: Primary Sources

Table 1.3 shows that the computed value of CMIN/df is 2.845, it is lower than the threshold limit. In addition to that fit indices values such as, NFI, RFI, TLI, CFI, GFI, AGFI, IFI, PCFI, and PNFI values are more than the mark of 0.9. It confirms that these fit indices have high fit with data. Moreover, RMSEA value is safely below the benchmark of 0.06. It certifies that the measurement model has good fit.

Discriminant Validity

Discriminant validity establishes that the contents of one variable are not primarily associated with those of other variables. To determine discriminatory validity, the correlation values between factors and standardized coefficient values are estimated. Then, discriminant validity is determined, and the squared correlation values are provided in a matrix together with the average variance. The results are given in Table 1.4

Table 1.4 Discriminant Validity

	SRVE	EXDY	PTLT	ESQL	ITNU	CSFN	FLMT	PVCY	WSAT	RPSN
SRVE	**0.692**									
EXDY	0.253	**0.669**								
PTLT	0.392	0.430	**0.613**							
ESQL	0.187	0.200	0.209	**0.622**						
ITNU	0.215	0.176	0.272	0.132	**0.586**					
CSFN	0.397	0.377	0.411	0.248	0.356	**0.578**				
FLMT	0.493	0.291	0.371	0.174	0.192	0.341	**0.666**			
PVCY	0.408	0.353	0.434	0.213	0.258	0.327	0.510	**0.622**		
WSAT	0.456	0.239	0.375	0.149	0.227	0.401	0.371	0.419	**0.664**	
RPSN	0.432	0.326	0.546	0.196	0.230	0.426	0.419	0.537	0.471	**0.631**

Data: Primary Sources

Table 1.4 furnishes that the square root of AVE. Its values are indicated in bold across the crossways. It confirms that AVE values are more than the square of correlation values, hence, it confirms that the discriminant validity.

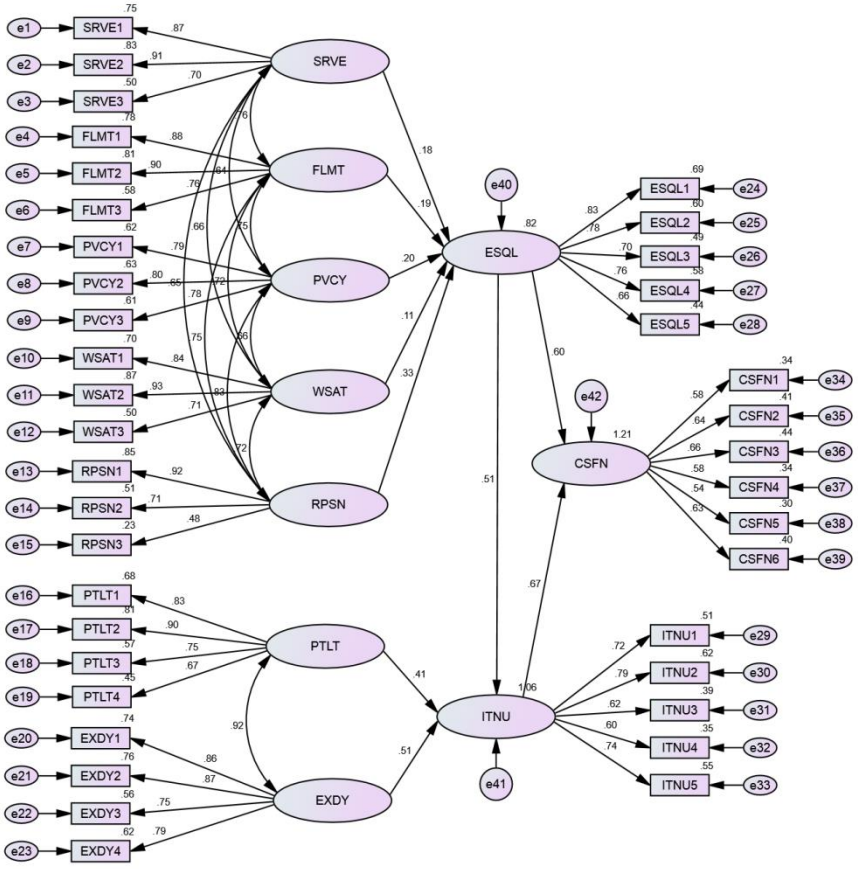

Figure 1.3 Standardized Coefficients Structural Equation Modeling

Table 1.5

Path Relationship			Unstandardized Coefficients	Standardized Coefficients	SE	t	p
SRVE3	<---	SRVE	.824	.704	.052	15.742	***
SRVE2	<---	SRVE	1.047	.911	.046	22.669	***
SRVE1	<---	SRVE	1.000	.866			
FLMT3	<---	FLMT	.911	.760	.050	18.188	***
FLMT2	<---	FLMT	1.010	.902	.042	24.324	***
FLMT1	<---	FLMT	1.000	.881			
PVCY3	<---	PVCY	1.045	.780	.067	15.713	***
PVCY2	<---	PVCY	1.100	.797	.068	16.101	***
PVCY1	<---	PVCY	1.000	.789			
WSAT3	<---	WSAT	.852	.706	.055	15.425	***
WSAT2	<---	WSAT	1.096	.930	.050	21.838	***
WSAT1	<---	WSAT	1.000	.837			
RPSN3	<---	RPSN	.737	.484	.075	9.822	***
RPSN2	<---	RPSN	.851	.712	.053	16.183	***
RPSN1	<---	RPSN	1.000	.920			
ESQL1	<---	ESQL	1.000	.828			
ESQL2	<---	ESQL	.811	.776	.045	18.126	***
ESQL3	<---	ESQL	.740	.700	.047	15.679	***
ESQL4	<---	ESQL	.790	.761	.045	17.631	***
ESQL5	<---	ESQL	.655	.664	.045	14.613	***
PTLT4	<---	PTLT	.763	.672	.053	14.522	***
PTLT3	<---	PTLT	.805	.755	.047	16.979	***
PTLT2	<---	PTLT	.998	.897	.045	22.034	***
PTLT1	<---	PTLT	1.000	.826			
EXDY4	<---	EXDY	.909	.786	.048	19.135	***
EXDY3	<---	EXDY	.870	.751	.049	17.808	***
EXDY2	<---	EXDY	.978	.870	.043	22.842	***
EXDY1	<---	EXDY	1.000	.862			
ITNU1	<---	ITNU	1.000	.716			
ITNU2	<---	ITNU	1.029	.786	.066	15.650	***
ITNU3	<---	ITNU	.932	.625	.075	12.358	***
ITNU4	<---	ITNU	.876	.595	.074	11.765	***
ITNU5	<---	ITNU	1.109	.744	.075	14.781	***
CSFN1	<---	CSFN	1.000	.582			
CSFN2	<---	CSFN	1.092	.638	.093	11.738	***
CSFN3	<---	CSFN	1.066	.665	.088	12.076	***
CSFN4	<---	CSFN	.978	.583	.089	11.014	***
CSFN5	<---	CSFN	.840	.545	.080	10.483	***
CSFN6	<---	CSFN	.950	.629	.082	11.626	***
ESQL	<---	SRVE	.185	.177	.051	3.598	***
ESQL	<---	FLMT	.203	.193	.065	3.103	.002
ESQL	<---	PVCY	.256	.204	.091	2.822	.005
ESQL	<---	WSAT	.120	.113	.052	2.305	.021
ESQL	<---	RPSN	.495	.333	.119	4.146	***
ITNU	<---	EXDY	.344	.508	.055	6.244	***

ITNU	<---	PTLT	.270	.405	.053	5.071	***
ITNU	<---	ESQL	.356	.514	.026	13.894	***
CSFN	<---	ESQL	.374	.595	.030	12.332	***
CSFN	<---	ITNU	.607	.669	.051	11.996	***

Table 1.6 Fit Indices – Structural Equation Model

Fit Indices	Model Fit Indices	Threshold Value
CMIN/df	2.880	<3
Relative Fit Index (RFI)	0.907	>0.9
Normed Fit Index (NFI)	0.904	>0.9
Tucker-Lewis Index (TLI)	0.913	>0.9
Comparative Fit Index (CFI)	0.916	>0.9
Incremental Fit Index (IFI)	0.917	>0.9
Goodness of Fit Index (GFI)	0.945	>0.9
Adjusted Goodness of Fit Index (AGFI)	0.931	>0.9
Parsimonious Normed Fit Index (PNFI)	0.905	>0.9
Parsimonious Comparative Fit Index (PCFI)	0.914	>0.9
Root Mean Square Error of Approximation (RMSEA)	0.057	<0.06

Source: Direct Survey

Scope for Further Research

1. The study considered Virudhunagar district of Tamilnau only, future studies should cover huge area for examination.
2. The present study considered only the e-service quality aspect of public and private sector banks, further studies should inspect the difference between service quality and e-service quality of banks.
3. Further studies should consider benefit of e-banking services to the customers between high literate regions with low literate regions.
4. Future studies should consider entire population of a bank in order to find the effectiveness of e-service quality of commercial banks and suggest suitable policy measures.
5. Further studies should assess the e-service quality of Indian banks with banks of developed countries.

Chapter Scheme

The dissertation is prepared with five chapters, these are:

Chapter – I: Introduction

The chapter presents introduction of the study, e-service quality in banks, intention to use, customer satisfaction. It also covers, statement of the problem, need for the study, research questions, research objectives, scope of the study, conceptual framework, working definitions, and the chapter scheme.

Chapter – II: Review of Literature

The chapter presents reviews of earlier literature on service efficiency, fulfilment, privacy, website aesthetics, responsiveness and e-service quality. It also presents reviews relating to expediency, potential threats, intention to use and customer satisfaction. Finally, research gap is identified.

Chapter – III: Research Methodology

The chapter presents the research methodological part and limitations of the study. It covers the research design, data collection design, sampling design, reliability and validity analysis, and use of statistical tools for data analysis.

Chapter – IV: Data Analysis and Interpretation

The chapter discusses the detailed analysis of data and result interpretation in accordance with the research objectives. Suitable statistical tools are employed for analysis of data.

Chapter – V: Findings, Suggestions, and Conclusion

The chapter provides the detailed findings of the study, suitable suggestions and conclusion of the study.

Reference

1. Zulfauzy, A.I. & Rachmawati, I. Analysis of factors influencing adoption of mobile banking in Indonesia. *International Journal of Science and Research, **7***(2)(2018), 868-874.
2. Zeithaml, V.A., Parasuraman, A. & Malhotra, A. Services quality delivery through website. *Journal of Academy of Marketing Science, **52***(4)(2002),2-22.
3. Shankar, A. & Jebarajakirthy, C. The influence of e-banking service quality on customer loyalty: a moderated mediation approach. *International Journal of Bank Marketing, **37***(5)(2019),1119-1142.
4. Raza, S.A., Jawaid, S.T. & Hassan, A Internet banking and customer satisfaction in Pakistan. *Qualitative Research in Financial Markets, **7***(1)(2015),24-36.
5. Nimako, S.G., Gyamfi, N.K. & Wandaogou, A.M.M.. Customer satisfaction with internet banking service quality in the Ghanaian banking industry. *International Journal of Scientific & Technology Research, **2***(7)(2013),165-175.
6. Santhiya, R.T. & Saravanan, A. A study on customer satisfaction towards net banking with special reference to general banking customer in Coimbatore city. *Journal of Emerging Technologies & Innovative Research, **5***(11)(2018),49-61.
7. Kaur, S.J., Ali, L., Hassan, M.K. and Al-Emran, M. Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. *Journal of Financial Services Marketing, **26***(2021),107-121.
8. Khatun, M.N., Mitra, S. and Sarker, M.N.I. Mobile banking during COVID-19 pandemic in Bangladesh: A novel mechanism to change and accelerate people's financial access. *Green Finance, **3***(3)(2021),253-267.
9. Qasabah, M.M.H. and Siddiq, A. Customers' perception and satisfaction towards e-banking service in Yemen and its quality.*South Asian Journal of Social Studies and Economics, **12***(4)(2021),232-241.
10. Choudhury, P.K., Mishra, N. and Zipporah, G. Factors influencing digital banking service quality: a comparative study between SBI and HDFC bank in Hyderabad, India. *Journal of Contemporary Issues in Business and Government, **28***(2)(2022),1-13.
11. Abil Das, S.V. and Ravi, N.A study on the impact of e-banking service quality on customer satisfaction.*Asian Journal of Economics, Finance and Management, **5***(1)(2021),48-56.
12. Bala, T., Jahan, I., Al Amin, M., Tanin, M.H., Islam, M.F., Rahman, M.M. and Khatun, T. Service quality and customer satisfaction of mobile banking during covid-

19 lockdown; evidence from rural area of Bangladesh.*Open Journal of Business and Management, **9***(2021),2329-2357.

13. Fianto, B.A., Rahmawati, C.K. and Supriani, I. Mobile banking service quality and its impact on customer satisfaction of Indonesian Islamic banks.*JurnalEkonomi and KeuanganIsalam, **7***(1)(2021),59-76.
14. Nazaritehrani, A. and Mashali, B. Development of e-banking channels and market share in developing countries. *Financial Innovation, **6***(12)(2020),1-19.
15. Anbumalar, S., Veronica, J.J.M., Poornima, S., Vinisha, K. and Taniya, P. A study on consumer awareness and usage of e-banking transactions through mobile banking applications (Apps).*Compliance Engineering Journal, **12(**4)(2021),108-123.
16. Al Amin, M., Sultana, N., Saha, T., Islam, S.M.N. and Kashem, M.A. Customer's attitude towards mobile banking usage: a case study in Bangladesh. *Journal of Asian Finance, Economics and Business, **8***(2)(2021),419-426.
17. Metlo, M.Y., Hussain, N., Saqib, G., Phulpoto, K. and Abro, S. Impact of mobile banking on customers' satisfaction. *International Journal of Management, **12***(1)(2021),1263-1271

LIST OF RESEARCH PUBLICATIONS

1. C.Sam Stephen and S.Karthik Service quality gap of rural customers towards banking services in karur vysya bank of virudhunagar district *Journal of informatics education and research* **4**(3)(2024)1526-4726
2. C.Sam Stephen, S.Karthik,Vasanth Vinayagamoorthy, K.Kaleeswaran,M.Sathishkumar and K.Ravikumar Assessment of E-Service Quality in Union Bank of India with special reference to Virudhunagar District *Journal of Environmental protection and ecology* **25**(5)(2024)1546-1554.
3. C.Sam Stephen, S.Karthik, and R.Selvakumar Gap analysis in service quality with special reference to KVB in Virudhunagar district *IPE Journal of Management* **14**(1) (2024)2249-9040.